Final Report

Portal Project, Phase 5 Deer Lodge County, Montana IFB 2881-G

January, 1987

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L. C. HANSON COMPANY

CONSULTING ENGINEERS & SURVEYORS
HELENA — GREAT FALLS — GLENDIVE





Final Report

Portal Project, Phase 5 Deer Lodge County, Montana IFB 2881-G

January, 1987

Prepared for: Mr. Richard Juntunen, Chief

Abandoned Mine Reclamation

Bureau

Department of State Lands

1625 11th Ave.

Helena, MT 59620

Prepared by:

L.C. Hanson Company Consulting Engineers

P.O. Box 299

Helena, MT 59624

Project Inspector: Kent Barnes, E.I.T.



I. Introduction

A. Project Objectives

The Phase 5 Portal Project was undertaken to eliminate the public safety hazards resulting from unreclaimed mine openings at an abandoned hardrock mine in Deer Lodge County. Perimeter fencing of dangerous shafts and trenches was accomplished to eliminate accidental entry.

B. Project Location

The project covered the Gold Coin Mine, T5N R13W Secs. 20 NW & 21 NE, in Deer Lodge County, Montana. Location of this site is shown on the vicinity map contained herein.

C. History

Hardrock mining has taken place in Montana since 1862 and was essentially unregulated from a reclamation standpoint for over one hundred years. This resulted in thousands of hazardous shafts and adits in mining districts across the state.

Gold was discovered in the Gold Coin district in 1898. By 1906 the Gold Coin Mine was in full production with a 30 stamp mill to pulverize the ore. Operations continued until 1912. The depression in the 1930's brought reopening at the Gold Coin and the mine operated continuously from 1930 to 1940. Mining was renewed for brief periods during the 1950's, 1960's and in 1984.

D. Site Description And Problems

The site included in this project is an historic site, is located close to the public road and in a recreation area. All mine openings threatened public safety. The shafts and trenches involved were of depth great enough to prevent unaided escape upon entry.



II. Description of Project Reclamation

A. Project Planning

Backfill was recommended for all mine openings to permanently eliminate the hazards. The landowner refused to allow this, insisting instead on fencing. This technique does accomplish the goal of preventing accidental entry but is semi-permanent in nature and may require maintenance in the future.

B. Chronological History

Pre-Bid Conference Bid Opening Contract Award Contract Awarded To: May 1, 1984 May 17, 1984 May 18, 1984

McDaniels & Sons Contractors P.O. Box 33 Neihart, MT 59465 (406)236-5357

Pre-construction Meeting
Notice to Proceed
Began Work
Substantial Completion
Project Completed
June 11, 1984
June 18, 1984
July 6, 1984
July 6, 1984

C. Equipment

J.D. 550 Track Crawler with Post Driver Dynamite for Blasting Post Holes

D. <u>Construction Operations</u>

The Contractor drove or blasted and set posts. Combination barbed and woven wire fence installed as specified. The revegetation work was cancelled when the property was sold and the new owners wanted no additional work performed.

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Product Planning

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D. Construction Coarations

The Contractor drove or blasted and ret posts. Combination bathed as drove award as the Combination of the seem of the seem owners wanted as additional work performed.

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III. Cost Summary

A. Final Payment Request

A copy of the Final Payment Request is contained in Appendix A. That document contains the final quantities and costs for each work item.

B. Change Order

No Change Orders were executed during the course of the project.

C. Cost Per Site / Unit

The following summary describes the work performed (with measured quantities) and the total cost of the project:

1. Gold Coin Mine Site

\$ 9,499.00

- a. Install wire fence (201.7 rods)
- b. Install hazard signs (29 each)
- c. Furnish seed

Total Project Cost

\$ 9,499.00

IV. Summary

A. Completed Reclamation

The required work was completed within the Contract time allowed.

The project resulted in limiting access to the mine openings by constructing permieter fencing. Hazard signs were installed where appropriate.

B. Comments

Ownership changed during the course of the project.

Renewed mining activity has been undertaken at the project site.

III. Cost Summery

A. Final Payment Semment

A copy at the Finel Payment Suquest is rontained in Appendix A rice for some document contains the final questions

B. Change Seder

Mo Change Orders were executed during the course of the

C. Cost Per Site / Unit

The following summery describes the work performed (with

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Gold Coin Mine Site
a. Instell wire fence (201.7 rods)
b. Imstell herard siene (29 each)

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Total Project Cost

V. Summary

A. Completed Reclamation

The required work was completed within the Contract time

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B. Commonts

Commercially changed during the course of the project Renewed mining society has been undertaken at the project site.

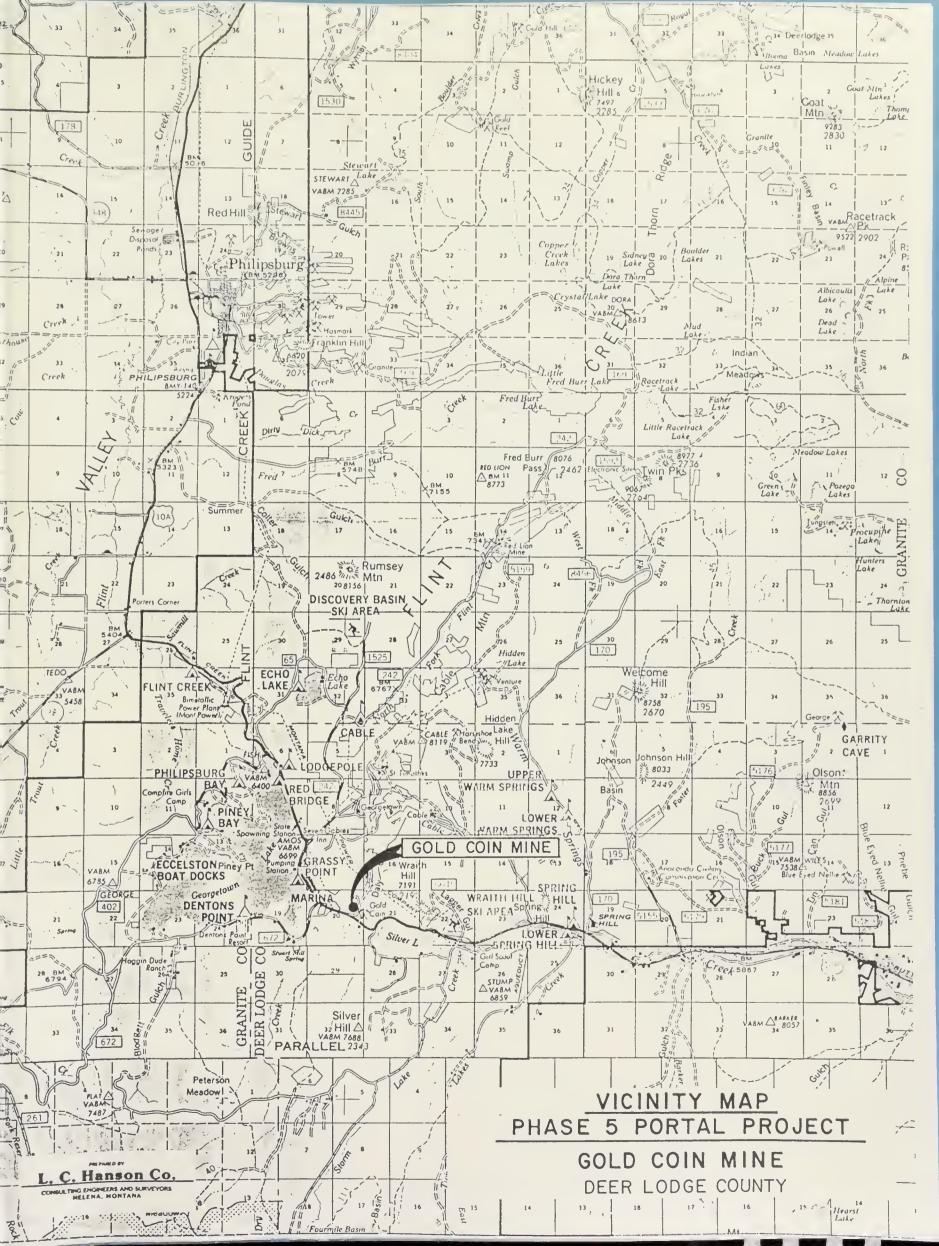
V. Slides

The slide log and slides are contained in Appendix B.

Sildes

The silde log and sildes are contained in Appendix D.

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APPENDIX A

PROJECT NAME	PORTAL PROJECT, PHAS	SE 5 - GOLD COIN MIN	Ε		
LOCATION DEEP	R LODGE COUNTY, MONTANA	PROJ. NO.	IFB	2881-G	
NAME OF CONTRA	CTOR MCDANIEL & SONS CON	ITRACTORS ADDRESS B	nx 33,	Neihart, MT	59465

CHANGE ORDERS C		CONTR.	CONTRACT STATUS					
No.	Description	- Amount	Total Amoun	t	Completed Amount	Uncomplete Amount	Per Cent Complete	
		NOTE: See	attach	ned ju	stification	or deletio	n	
		of	id Ite	em #7.				
Total Change Orders								
CONTRACT TO DATE INCLUDING CHANGE ORDERS		11,43	4.52	9,460.10	-0-	100%		
TOTAL	RETAINAGE	\$		COM	PLETED TO DAT	Έ	\$ 9,460.10	
SECUR	RITIES ON DEPOSIT	\$,	PLU	S MATERIALS P	URCHASED	\$ 39.10	
ADJUS	TED RETAINAGE	\$		TOTAL COMPLETED TO DATE \$ 9,499.20				
. –				* 0% OR ADJUSTED RETAINAGE \$ -0-				
*For use only when securities are on								
deposit in lieu of 10% retainage.								
			LESS PREVIOUS PAYMENTS \$ 7,568.08					
			AMOUNT DUE THIS PAYMENT \$ 1,931.12					
•			LESS 1% TAX \$ 19.31					
			TOTAL DUE CONTRACT \$ 1,911.81					
I certify that this claim is correct and just in all respects and that payment or credit has not been received.								
McDaniel and Sons Contractors			Montana Dept. of State Lands					
(Contractor)			Owner					
By Miller Hilly warmen		Jun Fri Trally						
Date_	m - 2	23 1983				,		
RECOMMENDED BY:			6/5/25					
L. C. Hanson Company								
(Engineer)								
By James J. Salin								
	5/28/84							



PORTAL PROJECT, PHASE 5 - GOLD COIN MINE

PAYMENT REQUEST NO. 3 - (FINAL) (FOR RETAINAGE AND SEED)

ITEMIZATION OF QUANTITIES AND COSTS							
ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	WORK COMPLETED TO DATE	COST COMPLETED WORK	PERCENT COMPLETE	
1.	FENCE - WIRE TYPE CW OR CM	179 RODS	28.88	201.7 RODS	\$5,825.10	100%	
2.	PANEL - SINGLE TYPE CW OR CM	20 EACH	75.00	7	525.00	100	
3.	PANEL - CORNER TYPE CW OR CM :	31 EACH	100.00	25	2,500.00	100	
4.	GATE - METAL 4 FOOT	30 L.F.	15.00	31 L.F.	465.00	100	
5.	DEADMAN ;	5 EACH	15.00	NONE REQUIRED	0.00	100	
6.	INSTALL OWNER-FURNISHED SIGNS	28 EACH	5.00	29	145.00	100	
7.	SEED, FERTILIZER, MULCH	LUMP SUM	*1,000.00	NONE	0.00	0	
			* Deleted -	SEE ATTACHED	JUSTIFICATION	ON.	



PAYMENT REQUEST NO. 3 (FINAL) (FOR RETAINAGE AND SEED)
PORTAL PROJECT, PHASE 5 - GOLD COIN MINE - DEER LODGE COUNTY, MT IFB 2881-G
May 20, 1985

JUSTIFICATION: Subsequent to completion of the fencing, Lorraine Hoben of Anaconda, MT sold the GOLD COIN MINE to Midas Gold, Inc. of Spokane, Washington. Midas is currently working the area extensively and does not wish any further work done on the property. The seeding, fertilizing and mulching in the LUMP SUM BID PRICE of S1,000.00 is, therefore, deleted. The Contractor had purchased seed last fall in the amount of S34.00 for use on this project as per the attached invoice.

The total payment for this request is, therefore, in the amount of the retainage (\$1,892.02) and the seed plus a 15% handling charge (Total \$39.10) for a TOTAL of \$1,931.12.

PAYMENT REQUEST NO. 3 (FINAL) (FOR RETAINAGE AND SEED)
PORTAL PROJECT, PHASE 5 - GOLD COIN NINE - DEER LODGE COUNTY, NT (FB 288)-6

JUSTIFICATION: Subsequent to completion of the fencing, Lorragne Hoben of Anaconda, MI sold the GRLD COFW MINE to Midas Gold, Inc. of Sockers, Washington. Midas is currently working the area extensively and does not wish any further work done on the property. The seeding, Fertilizing and multhing in the LUMP SUM BID PRICE of S1,000.00 is, therefore, deleted. The Contractor mad purchased seed last Fail in the amount of S34.00 for use on this project as per the attached invoice.

The total payment for this request is, therefore, in the amount of the retainage (51,892.02) and the meet plus a 18% handling charge (Total 539.10) for a TOTAL of \$1.931.12.

APPENDIX B

B XIONS99A

Phase 5 Portal Project Gold Coin Mine Silver Lake Mining District, Deer Lodge County Slide Log

```
1.
     Oct., 1982
                   Before:
                             Gold Coin Mine - view with mill
     Oct., 1982
                             Gold Coin Mine - aerial view
2.
                   Before:
                             Gold Coin Mine - aerial view
3.
     Oct., 1982
                   Before:
     Oct., 1982
                             Gold Coin Mine - aerial view
4.
                   Before:
5.
     Oct., 1982
                            Gold Coin Mine - aerial view
                   Before:
                            Gold Coin Mine - aerial view, shaft #1
6.
     Oct., 1982
                   Before:
7.
     Oct., 1982
                   Before:
                            Gold Coin Mine - aerial view, trench #2
     Oct., 1982
8.
                   Before:
                            Gold Coin Mine - aerial view
     Oct., 1982
9.
                   Before:
                             Gold Coin Mine - aerial view
                             Gold Coin Mine - aerial view
10.
     Oct., 1982
                   Before:
11.
     May, 1983
                   Before:
                             Gold Coin Mine - lower workings & mill
     May, 1983
                             Gold Coin Mine - mill
12.
                   Before:
     May, 1983
13.
                   Before:
                            Gold Coin shaft #1 at cabin - fence
14.
     May, 1983
                   Before:
                             Gold Coin shaft #1 at cabin - fence
     May, 1983
                             Gold Coin shaft #1 at cabin - fence
15.
                   Before:
                             Gold Coin shaft #1 - fence installed
16.
     July, 1984
                   During:
17.
                             Gold Coin shaft #1 - fence installed
     July, 1984
                   During:
    July, 1984
July, 1984
18.
                             Gold Coin shaft #1 - fence installed
                   During:
19.
                             Gold Coin shaft #1 - fence installed
                   During:
     May, 1983
20.
                   Before:
                             Gold Coin east trench - enclosed in
                             area #1 fence
21.
                             Gold Coin east trench - enclosed in
     May, 1983
                   Before:
                             area #1 fence
22.
     May, 1983
                   Before:
                             Gold Coin east trench - enclosed in
                             area #1 fence
23.
     May, 1983
                   Before:
                             Gold Coin east trench - enclosed in
                             area #1 fence
24.
     May, 1983
                   Before:
                             Gold Coin east trench - enclosed in
                             area #1 fence
25.
     May, 1983
                   Before:
                             Gold Coin east trench - enclosed in
                             area #1 fence
26.
     May, 1983
                   Before:
                             Gold Coin east trench - enclosed in
                             area #1 fence
27.
     July, 1984
                             Gold Coin area #1 enclosure -
                   Before:
                             preconstruction
28.
     July, 1984
                   Before:
                             Gold Coin area #1 enclosure -
                             preconstruction
29.
     July, 1984
                    Before:
                             Gold Coin area #1 enclosure -
                             preconstruction
30.
     July, 1984
                    Before:
                             Gold Coin area #1 enclosure -
                             preconstruction
31.
     July, 1984
                             Gold Coin area #1 enclosure -
                    Before:
                             preconstruction
32.
     July, 1984
                   Before:
                            Gold Coin area #1 enclosure -
```



```
preconstruction
33.
    July, 1984
                 Before:
                            Gold Coin area #1 enclosure -
                            preconstruction
    July, 1984 Before:
34.
                            Gold Coin area #1 enclosure -
                            preconstruction
                  Before:
35.
    July, 1984
                            Gold Coin area #1 enclosure -
                            preconstruction
36.
    July, 1984
                   Before:
                            Gold Coin area #1 enclosure -
                            preconstruction
37.
     July, 1984
                   Before:
                            Gold Coin area #1 enclosure -
                            preconstruction
    July, 1984
38.
                   Before:
                            Gold Coin area #1 enclosure -
                            preconstruction
39.
     July, 1984
                   Before:
                            Gold Coin area #1 enclosure -
                            preconstruction
40.
     July, 1984
                   During:
                            Gold Coin - post stockpile near mill
41.
     July, 1984
                   During:
                            Gold Coin area #1 enclosure - fence
                            construction, shows some site damage
42.
                   During:
                            Gold Coin area #1 enclosure
     July, 1984
                            Gold Coin area #1 traverse sequence - 1/9
43.
     July, 1984
                   After:
44.
     July, 1984
                   After:
                            Gold Coin area #1 traverse sequence - 2/9
                            Gold Coin area #1 traverse sequence - 3/9
     July, 1984
45.
                   After:
                            Gold Coin area #1 traverse sequence - 4/9
46.
     July, 1984
                   After:
47.
     July, 1984
                   After:
                            Gold Coin area #1 traverse sequence - 5/9
                            Gold Coin area #1 traverse sequence - 6/9
     July, 1984
                   After:
48.
                            Gold Coin area #1 traverse sequence - 7/9
     July, 1984
49.
                   After:
     July, 1984
                   After:
                            Gold Coin area #1 traverse sequence - 8/9
50.
     July, 1984
                            Gold Coin area #1 traverse sequence - 9/9
51.
                   After:
                            Gold Coin west trench - enclosed in
52.
     May, 1933
                   Before:
                            area #2 fence
                            Gold Coin west trench - enclosed in
53.
    May, 1983
                   Before:
                            area #2 fence
    May, 1983
                            Gold Coin west trench - enclosed in
54.
                   Before:
                            area #2 fence
                            Gold Coin area #2 enclosure -
55.
    July, 1984
                   Before:
                            preconstruction
                            Gold Coin area #2 enclosure -
     July, 1984
56.
                   Before:
                            preconstruction
57.
     July, 1984
                   Before:
                            Gold Coin area #2 enclosure -
                            preconstruction
     July, 1984
                            Gold Coin area #2 enclosure -
58.
                   Before:
                            preconstruction
                            Gold Coin area #2 enclosure -
     July, 1984
59.
                   Before:
                            preconstruction
                            Gold Coin area #2 enclosure -
60.
    July, 1984
                   Before:
                            preconstruction
                            Gold Coin area #2 enclosure -
    July, 1984
                   Before:
61.
                            preconstruction
     July, 1984
                   Before:
                            Gold Coin area #2 enclosure -
62.
                            preconstruction
                            Gold Coin area #2 enclosure -
                   Before:
63.
     July, 1984
                            preconstruction
```



```
64.
     July, 1984
                            Gold Coin area #2 traverse sequence - 1/10
                   After:
65.
     July, 1984
                   After:
                            Gold Coin area #2 traverse sequence - 2/10
                            Gold Coin area #2 traverse sequence - 3/10
     July, 1984
66.
                   After:
     July, 1984
                            Gold Coin area #2 traverse sequence - 4/10
67.
                   After:
     July, 1984
68.
                            Gold Coin area #2 traverse sequence - 5/10
                   After:
     July, 1984
69.
                   After:
                            Gold Coin area #2 traverse sequence - 6/10
     July, 1984
                            Gold Coin area #2 traverse sequence - 7/10
70.
                   After:
71.
     July, 1984
                   After:
                            Gold Coin area #2 traverse sequence - 8/10
     July, 1984
72.
                            Gold Coin area #2 traverse sequence - 9/10
                   After:
73.
     July, 1984
                   After:
                            Gold Coin area #2 traverse sequence -10/10
74.
    May, 1983
                   Before:
                            Gold Coin ridgeline workings -
                             enclosed in area #3 fence
75.
                            Gold Coin ridgeline workings -
    May, 1983
                   Before:
                             enclosed in area #3 fence
76.
     May, 1983
                   Before:
                            Gold Coin ridgeline workings -
                             enclosed in area #3 fence
77.
     May, 1983
                   Before:
                            Gold Coin ridgeline workings -
                             enclosed in area #3 fence
78.
    May, 1983
                   Before:
                            Gold Coin ridgeline workings -
                             enclosed in area #3 fence
79.
    May, 1983
                   Before:
                            Gold Coin ridgeline workings -
                             enclosed in area #3 fence
80.
     July, 1984
                   Before:
                            Gold Coin area #3 enclosure -
                             preconstruction
81.
     July, 1984
                   Before:
                            Gold Coin area #3 enclosure -
                            preconstruction
82.
     July, 1984
                   Before:
                            Gold Coin area #3 enclosure -
                             preconstruction
83.
                   Before:
     July, 1984
                            Gold Coin area #3 enclosure -
                             preconstruction
84.
    July, 1984
                   Before:
                            Gold Coin area #3 enclosure -
                             preconstruction
85.
    July, 1984
                            Gold Coin area #3 enclosure -
                   Before:
                             preconstruction
86.
     July, 1984
                   During:
                            Gold Coin area #3 corner post
                             installation sequence 1/6
87.
     July, 1984
                            Gold Coin area #3 corner post
                   During:
                             installation sequence 2/6
88.
     July, 1984
                   During:
                            Gold Coin area #3 corner post
                             installation sequence 3/6
                             Gold Coin area #3 corner post
89.
     July, 1984
                   During:
                             installation sequence 4/6
90.
     July, 1984
                   During:
                            Gold Coin area #3 corner post
                             installation sequence 5/6
                             Gold Coin area #3 corner post
91.
     July, 1984
                   During:
                             installation sequence 6/6
92.
     July, 1984
                   After:
                             Gold Coin area #3 traverse sequence - 1/10
     July, 1984
93.
                   After:
                             Gold Coin area #3 traverse sequence - 2/10
     July, 1984
94.
                             Gold Coin area #3 traverse sequence - 3/10
                   After:
95.
     July, 1984
                             Gold Coin area #3 traverse sequence - 4/10
                   After:
     July, 1984
96.
                   After:
                            Gold Coin area #3 traverse sequence - 5/10
     July, 1984
                   After:
97.
                             Gold Coin area #3 traverse sequence - 6/10
```



```
July, 1984
98.
                   After:
                             Gold Coin area #3 traverse sequence - 7/10
99.
     July, 1984
                             Gold Coin area #3 traverse sequence - 8/10
                   After:
100. July, 1984
                             Gold Coin area #3 traverse sequence - 9/10
                   After:
101. July, 1984
                   After:
                             Gold Coin area #3 traverse sequence - 10/10
102. May, 1983
                             Gold Coin shaft # 5 - fence
                   Before:
103. July, 1984
                             Gold Coin shaft #5 - fence construction
                   During:
104. July, 1984
                   During: Gold Coin shaft #5 - fence construction
105. July, 1984
                             Gold Coin shaft #5 - fence construction
                   During:
106. May, 1983
                             Gold Coin lower workings
                   Before:
107. May, 1983
                   Before:
                             Gold Coin shaft #6 - fence
108. July, 1984
                             Gold Coin shaft #6 - fence construction
                   During:
109. July, 1984
                             Gold Coin shaft #6 - site damage
                   After:
110. July, 1984
                   After:
                             Gold Coin shaft #6 - site damage
111. July, 1984
                             Gold Coin - access conditions prior
                   Before:
                             to construction
                             Gold Coin - access conditions prior
112. July, 1984
                   Before:
                             to construction
113. July, 1984
                   Before:
                             Gold Coin - access conditions prior
                             to construction
                   Before:
114. July, 1984
                             Gold Coin - access conditions prior
                             to construction
                   After:
115. July, 1984
                             Gold Coin - site damage near shafts
                             #1 & #5
                   After:
116. July, 1984
                             Gold Coin - site damage above fence
                             enclosures #1 & #2
                             Gold Coin - wheel track access to
117. July, 1984
                   After:
                             fence enclosure #2
118. July, 1984
                   After:
                             Gold Coin - access road created by
                             contractor
119. July, 1984
                             Gold Coin - access road created by
                   After:
                             contractor near fence enclosure #3
                             Phase 5 final inspection of fencing Phase 5 final inspection of fencing
120. Sept., 1984
                   After:
121. Sept., 1984
                   After:
122. Sept., 1984
                             Phase 5 final inspection of fencing
                   After:
                            Phase 5 final inspection of fencing
123. Sept., 1984
                   After:
                             Phase 5 final inspection of fencing
124. Sept., 1984
                   After:
```





